

SEQUENCE LISTING

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NADLER, LEE M.
RENNERT, PAUL
JELLIS, CINDY L.
GREENFIELD, EDWARD
GRAY, GARY S.

<120> METHODS OF INHIBITING T CELL
PROLIFERATION OR IL-2 ACCUMULATION WITH CTLA-4
SPECIFIC ANTIBODIES (AS AMENDED)

<130> RPI-016CPA2DV

<150> 08/253783

<151> 2000-09-20

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<170> FastSEQ for Windows Version 4.0

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<223> Peptide

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1 5 10 15
Ser Ala Arg Thr
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Thr Val His Thr
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Asp Glu Val Ser Ala Ala Ser Trp Pro Pro Tyr Tyr Ile Trp Glu Arg
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Val Pro His Ala
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<210> 6
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Leu Arg Pro Thr His Gln Phe Leu Pro Ala Tyr Tyr Leu Ser Asn Arg
1 5 10 15
Gln Leu Ser Leu
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His Phe Asp Tyr Met Ile Arg Asn Arg Thr Pro Tyr Tyr Gln Trp Pro

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Thr Val Gly Gln

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Arg Asp Arg Thr Gly Ala Val Val Gly Thr Gln Pro Pro Tyr Trp Leu

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Gly Ala Phe Arg

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Gly Phe Trp Gly Met Glu His Asn Leu Thr Thr Gly Leu Ser Pro Thr

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Trp Tyr Leu Lys

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Ser Trp Asn Leu Arg Ser Leu Pro Asp Gln Pro Ile Gly Ser Pro Pro

1 5 10 15

Pro Tyr Trp Leu

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<220>
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<400> 11
Phe Ala Phe Lys Leu Gly Gly Asn Gly Leu Gly Gly Ala Thr Tyr Pro
1 5 10 15
Pro Tyr Phe Ile
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<223> Xaa = Any Amino Acid

<223> Peptide

<400> 12
Pro Pro Tyr Tyr Xaa
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<220>
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<400> 13
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<220>
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Lys Val Glu Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn
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Gly Thr Gly Gly
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Gly Gly Leu Val Met Ile Glu Arg Phe Asn Lys Leu Glu Leu Thr Trp
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Ala Asp Asp Asp
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<211> 20
<212> PRT
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Val Cys Ala Leu Pro Asp Val Gly Tyr Glu Phe Leu Thr Ser Asn Ala
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Asp Glu Pro Cys
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<212> PRT
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Tyr Leu Ala Asn His Phe Gly Trp Thr Ser Met Val Trp Asp Ala Asp
1 5 10 15
Asp Thr Gly His
20

<210> 18
<211> 20
<212> PRT
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<400> 18

Arg Asn Trp Ala Arg Arg Thr Ser Asn Leu Ser Trp Asp Gly Asp Asp
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Gly Ser Arg Gly
20

<210> 19

<211> 20

<212> PRT

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<223> Peptide

<400> 19

Thr Ala Glu Arg Cys Val Ser Leu Thr Trp Asn Asp Asp Thr Cys Asp
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Leu Thr Gly Ala
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<211> 20

<212> PRT

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<223> Peptide

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Phe Gly Leu Gln Ser Leu Cys Trp Glu Glu Asp Ala Gly Leu Val Phe
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Gly Gln Asp Ser
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<210> 21

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<220>

<223> Peptide

<400> 21

Asn Lys Glu Ser Leu Asn Trp Ala Asp Glu Leu Val Arg Lys Asp Pro
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Pro His Gly Val
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<210> 22

<211> 20

<212> PRT
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<220>
<223> Peptide

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Leu Ile Pro Lys
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<210> 23
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<220>
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Tyr Gly Ala Leu Thr Cys Phe Asn Asp Arg Ser Asp Cys Phe Phe Thr
1 5 10 15
Ser Pro Phe Ile
20

<210> 24
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<220>
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<400> 24
His Leu Asn Trp Gly Glu Glu Val Arg His Gln Gly Glu Pro Arg Ala
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Asp Gln Pro Phe
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<211> 20
<212> PRT
<213> Artificial Sequence

<220>
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<400> 25
His Leu Asn Trp Gly Glu Glu Val Arg His Gln Gly Glu Pro Arg Ala
1 5 10 15
Asp Gln Pro Phe
20

<210> 26
<211> 20
<212> PRT
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<220>
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<400> 26
Val Leu Thr Phe Leu Glu Arg Leu Leu Pro Ala Val Val Pro Arg Ser
1 5 10 15
Cys His Pro Gly
20

<210> 27
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide

<400> 27
Leu Ser Trp Gly Leu Glu Pro Trp Glu Gly Ser Phe Leu Trp Leu Thr
1 5 10 15
Glu Ser Pro Met
20

<210> 28
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Peptide

<400> 28
Leu Asn Trp Asp Ile Asp Ser Met Pro Met Gly Val Tyr Cys Asp Val
1 5 10 15
Pro Asp Ser Cys
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<210> 29
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<220>
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<400> 29

Leu Thr Phe Leu Asp Asp

1 5

<210> 30

<211> 18

<212> PRT

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<220>

<223> Peptide

<400> 30

Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp Ser

1 5 10 15

Ile Cys

<210> 31

<211> 12

<212> DNA

<213> Artificial Sequence

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<223> Oligonucleotide

<400> 31

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12

<210> 32

<211> 8

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 32

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8

<210> 33

<211> 46

<212> PRT

<213> Artificial Sequence

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18, 19, 20, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37,

38, 39, 40, 41, 42, 43, 44, 45, 46

<223> Xaa = Any Amino Acid

<223> Peptide

<400> 33

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Leu Thr Phe Leu Asp Asp Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
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 37, 38, 39, 40, 41, 42, 43, 44, 45

<223> Xaa = Any Amino Acid

<223> Peptide

<400> 34

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Xaa Xaa Xaa Xaa Pro Pro Tyr Tyr Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa
 20 25 30
 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa
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<210> 35

<211> 561

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

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 1 5 10 15

atc gcc agc ttt gtg tgt cag tat gca tct cca ggc aaa gcc act gag 96
 Ile Ala Ser Phe Val Cys Gln Tyr Ala Ser Pro Gly Lys Ala Thr Glu
 20 25 30

gtc cgg gtg aca gtg ctt cgg cag gct gac agc cag gtg act gaa gtc 144
 Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val
 35 40 45

tgt gcg gca acc tac atg atg ggg aat gag ttg acc ttc cta gat gat 192
 Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp

50 55 60
 tcc atc tgc acg ggc acc tcc agt gga aat caa gtg aac ctc act atc 240
 Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile
 65 70 75 80
 caa gga ctg agg gcc atg gac acg gga ctc tac atc tgc aag gtg gag 288
 Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu
 85 90 95
 ctc atg tac cca ccg cca tac tac ctg ggc ata ggc aac gga acc cag 336
 Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr Gln
 100 105 110
 att tat gta att gat cca gaa ccg tgc cca gat tct gac ttc ctc ctc 384
 Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Phe Leu Leu
 115 120 125
 tgg atc ctt gca gca gtt agt tgc ggg ttg ttt ttt tat agc ttt ctc 432
 Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe Tyr Ser Phe Leu
 130 135 140
 ctc aca gct gtt tct ttg agc aaa atg cta aag aaa aga agc cct ctt 480
 Leu Thr Ala Val Ser Leu Ser Lys Met Leu Lys Lys Arg Ser Pro Leu
 145 150 155 160
 aca aca ggg gtc tat gtg aaa atg ccc cca aca gag cca gaa tgt gaa 528
 Thr Thr Gly Val Tyr Val Lys Met Pro Pro Thr Glu Pro Glu Cys Glu
 165 170 175
 aag caa ttt cag cct tat ttt att ccc atc aat 561
 Lys Gln Phe Gln Pro Tyr Phe Ile Pro Ile Asn
 180 185

<210> 36
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<220>
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 Val Arg Val Thr Val Leu Arg Gln Ala Asp Ser Gln Val Thr Glu Val
 35 40 45
 Cys Ala Ala Thr Tyr Met Met Gly Asn Glu Leu Thr Phe Leu Asp Asp
 50 55 60
 Ser Ile Cys Thr Gly Thr Ser Ser Gly Asn Gln Val Asn Leu Thr Ile
 65 70 75 80
 Gln Gly Leu Arg Ala Met Asp Thr Gly Leu Tyr Ile Cys Lys Val Glu
 85 90 95

Leu Met Tyr Pro Pro Pro Tyr Tyr Leu Gly Ile Gly Asn Gly Thr Gln
100 105 110
Ile Tyr Val Ile Asp Pro Glu Pro Cys Pro Asp Ser Asp Phe Leu Leu
115 120 125
Trp Ile Leu Ala Ala Val Ser Ser Gly Leu Phe Phe Tyr Ser Phe Leu
130 135 140
Leu Thr Ala Val Ser Leu Ser Lys Met Leu Lys Lys Arg Ser Pro Leu
145 150 155 160
Thr Thr Gly Val Tyr Val Lys Met Pro Pro Thr Glu Pro Glu Cys Glu
165 170 175
Lys Gln Phe Gln Pro Tyr Phe Ile Pro Ile Asn
180 185

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<220>
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<210> 38
<211> 50
<212> DNA
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<220> .
<223> Oligonucleotide

<400> 38
gcagagagag gatcctcagt cagttagtca gaatctgggc acggttctgg 50

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<212> DNA
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<220>
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ccaaccagcg atggccgcag caatgcacgt ggcccagcct gctgtgg 107